

### **III. REMARKS**

1. Claims 1, 2, 6-20, 24-29, 31-35, 37-43, and 54-59 remain in the application.

Claims 60-68 are new.

Claims 3-5, 21-23, 30, 36 and 44-53 have been cancelled without prejudice.

Claims 1, 11, 19, 29, 41-43, and 54-59 have been amended. The amendments to the claims are not limiting, are not made for reasons related to patentability, and do not raise issues of estoppel.

2. Applicants appreciate the indication that claims 12 and 31 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. However, Applicants believe that these claims are patentable as they stand for the reasons stated below.

3. Applicants respectfully submit that claims 1, 2, 6-11, 13-20, 24-29, 32-35, 37-43, and 54-59 are not anticipated by Kalevo et al (WO98/41025, "Kalevo") under 35 USC 102 (b).

3.1 Kalevo fails to disclose or suggest determining a value of at least one parameter of the adaptive block boundary filtering operation performed on the block boundary by examination of the types of the first and second encoding methods, as recited by claims 1, 19, 41-43, and 54-57.

In response to the current Official Action, independent claims 1, 19, 41, 42, 43, 54, 55, 56 and 57 have been

amended to provide a minor clarification of the claimed subject matter. Dependent claims 11, 29, 58 and 59 have also been amended and new claims 60 - 68 have been added. The Applicant would like to emphasise that the amendments made to the aforementioned independent claims are in no way an acknowledgement that the claim rejections put forward in the present Official Action are valid or have any merit, but rather are intended to provide clarification to aid the Examiner in understanding the claimed invention.

Considering the amendment made to claim 1 in particular, that claim now reads as follows:

1. *A method for reducing visual artefacts due to block boundaries between decoded image blocks in a frame of a digital video signal, comprising performing an adaptive block boundary filtering operation on a block boundary formed between a first decoded image block on a first side of the block boundary and a second decoded image block on a second side of the block boundary, the first decoded image block having been encoded using a first type of encoding method and the second decoded image block having been encoded using a second type of encoding method, wherein the method comprises determining a value of at least one parameter of the adaptive block boundary filtering operation performed on the block boundary by examination of the types of the first and second encoding methods.*

Corresponding amendments have been made to claims 19, 41, 42, 43, 54, 55, 56 and 57.

### **Comments on Prior Art and Comparison with Claimed Invention**

The PCT publication newly cited by the Examiner, referred to in the following as "Kalevo", concerns an adaptive filter for removing image errors caused by boundaries between image blocks during decoding of an encoded video image (PCT publication, page 1, lines 3 - 5). According to Kalevo, the number of pixels selected for examination *"depends on the image content of the frame in the environment of the block boundary, particularly on the difference of the pixel values across the block boundary and the size of quantization step of the transformation coefficients used in the transformation coding of the blocks"* (see abstract).

Now considering claim 1 of the present application as newly amended, it can be understood that the present invention concerns an adaptive block boundary filtering operation performed on a block boundary that exists between a first and a second decoded image block, the first and second decoded image blocks having been encoded using respectively a first type of encoding method and a second type of encoding method, and wherein **at least one parameter of the adaptive block boundary filtering operation is determined on the basis of an examination of the types of the first and second encoding methods.**

It should be noted that Kalevo contains absolutely no disclosure or suggestion that at least one parameter of an adaptive block boundary operation can be determined on the basis of an examination of the types of encoding method used to encode image blocks on a first and a second side of a block boundary. Therefore, it is the Applicant's view Kalevo

cannot possibly form the basis of a rejection under 35 U.S.C. 35 § 102(b).

The same arguments apply to independent claims 19 (block boundary filter), 41 (storage medium), 42 (method of video encoding), 43 (method of video decoding), 54 (video encoder), 55 (video decoder), 56 (video codec) and 57 (mobile terminal).

3.2 Kalevo fails to disclose or suggest a filter arranged to operate adaptively according to the block types of the frame in the environment of the block boundary, as recited by claims 37, 38, 39, and 40.

Concerning independent claims 37, 38, 39 and 40, these claims relate to various aspects of the present invention in which a block boundary filter is arranged to operate adaptively according to the **block types** of a frame in the environment of a block boundary. These claims have not been amended in connection with the current Official Action since it is the Applicant's view that the Kalevo reference provides absolutely no teaching or suggestion that the type of an image block in the environment of a block boundary can be taken into account when performing an adaptive filtering operation to remove blocking artefacts. Again, for this reason, it is the Applicant's view that Kalevo cannot possibly form the basis of a rejection under 35 U.S.C. 102(b).

4. Furthermore, Applicant would like to point out that the Examiner has not specifically indicated any passages of Kalevo which he regards as significant in light of the patentability of the present invention. Applicant


respectfully requests that if the present negative view of the claims in view of Kalevo is maintained, the next communication should provide a specific indication of those parts of Kalevo considered pertinent.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$1,470.00 is enclosed for a three (3) month extension of time and the additional claims.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

 1 June 2006  
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